

In the Claims:

Please amend the claims as follows:

1 1. (Currently Amended) A method of treating patients for obesity, which
2 comprises the steps of:
3 performing bilateral stimulation of the patient's vagus nerve by applying a
4 stimulating electrical signal directly to the right and left vagi, wherein the parameters of
5 said signal are predetermined to produce a sensation of satiety in the patient.

Cancel claim 2.

1 3. (Currently Amended) The method of claim ~~2~~ 1, wherein said ~~intermittent~~
2 application of said stimulating electrical signal is chronic.

1 4. (Original) The method of claim 1, including the step of applying said
2 stimulating electrical signal continuously to the right and left vagi.

1 5. (Original) The method of claim 1, including the step of applying said
2 stimulating electrical signal to the right and left vagi during a customary mealtime
3 according to the patient's circadian cycle.

1 6. (Original) The method of claim 1, including the step of applying said
2 stimulating electrical signal to the right and left vagi upon delivery of an external
3 commencement signal administered by the patient.

1 7. (Original) The method of claim 1, including the step of applying the same
2 stimulating electrical signal to both the right and left vagi.

1 **8. (Original)** The method of claim **1**, including the step of applying a different
2 stimulating electrical signal to the right vagus from the stimulating electrical signal applied
3 to the left vagus.

1 **9. (Original)** The method of claim **1**, including using separate nerve stimulator
2 generators for stimulating the left and right vagi.

1 **10. (Original)** The method of claim **9**, including implanting said separate nerve
2 stimulator generators into the patient.

1 **11. (Original)** The method of claim **1**, including implanting nerve stimulator
2 generator apparatus into the patient for said bilateral stimulation of the vagi.

1 **12. (Original)** The method of claim **1**, including the step of applying said
2 stimulating electrical signal supra diaphragmatically to the left and right vagi.

1 **13. (Original)** The method of claim **1**, wherein said stimulating electrical signal is
2 characterized by a current magnitude below a predetermined retching level.

1 **14. (Original)** The method of claim **1**, wherein said stimulating electrical signal is
2 a pulse signal having a prescribed on-off duty cycle.

1 **15. (Original)** The method of claim **14**, including the step of applying said
2 stimulating electrical signal continuously to the right and left vagi so that pulses are
3 applied during the on portion of said duty cycle and not during the off portion of said duty
4 cycle.

1 **16. (Original)** The method of claim **15**, including using separate nerve stimulator

2 generators for stimulating the left and right vagi.

1 **17. (Original)** The method of claim **15**, including implanting separate nerve
2 stimulator generators into the patient to stimulate the left and right vagi.

1 **18. (Original)** The method of claim **15**, including the step of applying said
2 stimulating electrical signal supra diaphragmatically to the left and right vagi.

1 **19. (Original)** The method of claim **15**, wherein one of said parameters of said
2 stimulating electrical signal is a pulse current magnitude below a predetermined level at
3 which the signal tends to produce retching in the patient .

1 **20. (Original)** The method of claim **15**, wherein said pulse signal has a pulse
2 current magnitude in a range up to about 6 ma.

1 **21. (Original)** The method of claim **20**, wherein said pulse signal has a pulse
2 width in a range up to about 500 ms.

1 **22. (Original)** The method of claim **21**, wherein said pulse signal has a repetition
2 frequency of about 30 Hz.

1 **23. (Original)** The method of claim **22**, wherein said pulse signal has a duty cycle
2 with a ratio of on to off of about 1:1.8.

1 **24. (Original)** A method of treating patients for compulsive overeating, which
2 comprises the steps of:
3 stimulating left and right branches of the patient's vagus nerve simultaneously with
4 electrical pulses in a predetermined sequence of a first period in which pulses are applied

5 continuously, alternating with a second period in which no pulses are applied.

1 **25.** (Original) The method of claim **24**, including the step of applying said
2 electrical pulses to the vagus nerve at a supradiaphragmatic location.

1 **26.** (Original) The method of claim **25**, wherein said pulses have an electrical
2 current magnitude not exceeding about 6 ma.

1 **27.** (Original) The method of claim **26**, wherein said electrical current magnitude
2 is preselected to be less than a level that induces retching in the patient.

1 **28.** (Original) The method of claim **27**, wherein said pulses have a width not
2 exceeding about 500 ms.

1 **29.** (Original) The method of claim **28**, wherein said pulses have a repetition
2 frequency of about 30 Hz.

1 **30.** (Original) The method of claim **29**, wherein said second period is 1.8 times as
2 long as said first period.

1 **31.** (Original) Apparatus for treating patients suffering from compulsive eating
2 disorder, comprising:

3 implantable neurostimulator device means for simultaneously stimulating left and
4 right branches of the patient's vagus nerve with electrical pulses in a predetermined
5 sequence of a first period in which pulses are applied continuously, alternating with a
6 second period in which no pulses are applied; and

7 electrode means for implantation on said right and left branches in a
8 supradiaphragmatic position.

1 **32. (Original)** The apparatus of claim **31**, wherein said neurostimulator device
2 means generates pulses with an adjustable electrical current magnitude not exceeding
3 about 6 ma..

1 **33. (Original)** The apparatus of claim **32**, wherein said neurostimulator device
2 means generates pulses having an adjustable width not exceeding about 500 ms.

1 **34. (Original)** The apparatus of claim **33**, wherein said neurostimulator device
2 means generates pulses at a repetition frequency of about 30 Hz.
3

1 **35. (Original)** The method of claim **34**, wherein said second period is adjusted to
2 be 1.8 times as long as said first period.

1 **36. (Original)** The method of claim **1**, wherein said electrical signal is applied
2 synchronously to the right and left vagi.

1 **37. (Original)** The method of claim **1**, wherein said electrical signal is applied
2 asynchronously to the right and left vagi.

38. (Currently Amended) ~~The method of claim 1~~ A method of treating patients
for obesity, which comprises the steps of:
performing bilateral stimulation of the patient's vagus nerve by applying a
stimulating electrical signal to the right and left vagi, wherein the parameters of said signal
are predetermined to produce a sensation of satiety in the patient, wherein said electrical
signal is applied to the right and left vagi indirectly by stimulating the stomach or other
visceral organ.